

100 1
 20 2
 60 20
 22 27
 10 20
 300 20

Prof. A. E. Verrill

Tarleton H. Bean

B. F. Koons

E. A. Andrews

H. L. Bruner

L. A. Lee

Peter Parker Jr.

Capt. H. C. Chester

Richard Rathbun

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 917.

✓ <i>Raia laevis</i> ♂	1
✓ <i>Phycis chuss</i>	5
✓ " <i>tenuis</i>	2
✓ <i>Paralichthys oblongus</i>	2
✓ <i>Cottus 18-spinosus</i>	1
✓ <i>Hippoglossoides platessoides</i> (1 $\frac{7}{8}$ in.)	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 917

Date, July 16, 1881.

Locality, Off Martha's Vd.

Bearings, Lat. $40^{\circ}22'$ Lon. $70^{\circ}42'$

Time of day, 4.10 a.m. ; of tide,

State of sky,

Temperature of air, 66°

" surface of water, 63°

" at depth of fathoms,

" of bottom, 42°

Depth, in fathoms, 43

Nature of bottom, gr. mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 918.

✓	<i>Hippoglossoides platessoides</i>	5
	<i>Melanogrammus aeglefinus</i> juv.	1
✓	<i>Phycis chuss</i>	18
✓	" <i>tenuis</i>	2
✓	<i>Enchelyopus cimbrius</i>	6
✓	<i>Zoarces anguillaris</i>	1
✓	<i>Liparis</i> (in <i>Pecten</i>)	"

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

918

Date,

July 16, 1887.

Locality,

Bearings, Lat 40 20 24 Lon 70 41 30

Time of day, 5, 33 a.m. ; of tide,

State of sky,

Temperature of air,

67°

"

surface of water,

63°

"

at depth of ~~46~~ fathoms,

42° F.

"

of bottom,

42° F.

Depth, in fathoms,

~~46~~ 45°

Nature of bottom,

gn. mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 919.

✓ <i>Paralichthys oblongus</i>	10
✓ <i>Lophius piscatorius</i> ♂	1
✓ <i>Citharichthys arcifrons</i>	
✓ <i>Phycis chuss</i>	many
✓ " <i>tenuis</i>	1
✓ <i>Conger oceanica</i>	1 very savage.

✓ A small mass of *Lophius* spawn seen floating alongside.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 919

Date, July 16, 1881.

Locality,

Bearings, Lat. 40 16 18 Lon. 70 41 18

Time of day, 7 a.m. ; of tide,

State of sky,

Temperature of air, 70°

" surface of water, 66°

" at depth of fathoms,

" of bottom, 42.5°

Depth, in fathoms, 51 1/2

Nature of bottom, Gr. mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 920.

✓ *Citharichthys arctifrons* juv. ∞

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 920

Date, July 16, 1881.

Locality,

Bearings, Lat. $40^{\circ} 13'$ Lon $70^{\circ} 41' 54''$

Time of day, 8.20 a.m. ; of tide,

State of sky,

Temperature of air, 72°

.. surface of water, 66°

.. at depth of fathoms,

.. of bottom, $49^{\circ} (?)$

Depth, in fathoms, 61

Nature of bottom, gr. mud

Direction of surface current,

Force of surface current.

Direction of bottom current.

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 921.

1	<i>Citharichthys arctifrons</i> juv.	∞
	<i>Raia</i> large egg.	
	<i>Ammopleurops</i> ? or juv.	2
1	<i>Aphoristia</i>	

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 921

Date, July 16, 1881.

Locality,

Bearings, Lat 40 07 48 Lon 70 43 54

Time of day, 9.40 a.m. ; of tide,

State of sky,

Temperature of air, 75

" surface of water, 70

" at depth of fathoms,

" of bottom, 52⁰

Depth, in fathoms, 65'

Nature of bottom, Gr. mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 922.

<i>Peristedium miniatum</i>	5
<i>Citharichthys arctifrons</i> juv.	∞
<i>Raia</i> small egg	4

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 922

Date, July 16, 1881.

Locality,

Bearings, Lat. 40 03 48 Lon 70 45 54

Time of day, 10.57 am ; of tide,

State of sky,

Temperature of air, 76°

“ surface of water, 72

“ at depth of fathoms,

“ of bottom, 52°

Depth, in fathoms, 69

Nature of bottom, gn. mud + sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 923.

<i>Paralichthys oblongus</i>	Common
<i>Citharichthys actifrons</i> juv.	∞
<i>Menolepis sessilicauda</i>	1
<i>Phycis chuss</i>	Common
" <i>tenuis</i>	few
<i>Raia</i> large egg	1
<i>Raia</i> small "	few

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 923.

Date, July 16, 1881.

Locality,

Bearings, Lat 40 01 24 Lon 70 46

Time of day, 12.27 P.M. ; of tide,

State of sky,

Temperature of air, 74.5°

“ surface of water, 72°

“ at depth of fathoms,

“ of bottom, 52°

Depth, in fathoms, 96

Nature of bottom, sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 924.

<i>Halimæa senticosa</i>	1
<i>Macrurus Bairdii</i>	1 few
<i>Glyptocephalus cynoglossus</i>	1
<i>Phycis Chesteri</i>	moderate
<i>Merluccius</i>	few
<i>Raja radiata</i>	1
" <i>cylindrica</i>	few
<i>Myxine glutinosa</i>	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 924

Date, July 16, 1881.

Locality,

Bearings, Lat. 39 57 30 Lon 70 46

Time of day, 1.52 PM ; of tide,

State of sky,

Temperature of air, 74.5°

" surface of water, 71°

" at depth of fathoms,

" of bottom, 44.5°

Depth, in fathoms, 160

Nature of bottom, sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 925.

<i>Halibutia senticosa</i>	moderate
<i>Glyptocephalus cynoglossus</i>	few
<i>Macrurus Bairdii</i>	∞
" <i>carminatus</i>	2
<i>Pisces Chesteri</i>	many
<i>Merlucius</i> very large	1
<i>Lucodes Herrilli</i>	few
<i>Photunculus microps</i>	2
<i>Scopelus</i>	1
<i>Careproctus</i> or <i>Liparis</i>	1
<i>Synaphobranchius pinnatus</i>	few

TEMPERATURE RECORD.

Instrument used,

Current number of observation, *925.*

Date, *July 16, 1881.*

Locality,

Bearings, *Lat 39 55 Lon 70° 47*

Time of day, *3.35 Pm* ; of tide,

State of sky,

Temperature of air, *74°*

“ surface of water, *71°*

“ at depth of fathoms,

“ of bottom, *42° F.*

Depth, in fathoms, *224*

Nature of bottom, *Sd + mud*

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 926

No fish

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 926.

Date, July 16, 1881.

Locality,

Bearings, Lat 39 56 Lon 70 46

Time of day, 5.24 P.M. ; of tide,

State of sky,

Temperature of air, 74°

" surface of water, 71°

" at depth of fathoms,

" of bottom, 44°

Depth, in fathoms, 195

Nature of bottom, Mud & Sil

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer.

REMARKS.

Haul 927.

<i>Limanda ferruginea</i>	juv.	few
<i>Paralichthys dentatus</i>	very large ♀	1
Crane's small; 1 <i>Iophopsetta maculata</i> in its stomach.		
<i>Iophopsetta maculata</i>		20
<i>Pleuronectes americanus</i>		23
<i>Trachichthys oblongus</i>		9
<i>Merluccius bilinearis</i>		3
<i>Pleuronectes carolinus</i>		2
<i>Cottus 18-spinosus</i>	juv.	1
<i>Raja erinacea</i>	17 ♂ 10 ♀	
Adult & young ♂ together.		

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 927.

Date, July 20, 1881.

Locality, Gay Head Pt. N by S 70° S dist. $2\frac{1}{2}$ m.

Bearings, Tarpaubin Cove Lt. NNE " 6 "

Time of day, 10.47 A.M.; of tide, Ebb

State of sky, Cloudy

Temperature of air, 68

" surface of water, 62

" at depth of fathoms,

" of bottom, 59

Depth, in fathoms, 11

Nature of bottom, sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 928.

<i>Pleuronectes americanus</i> (small)	23
<i>Uranoscopus fuscus</i> juv.	1
<i>Paralichthys oblongus</i>	3
<i>Urophycis maculata</i> (small)	25
<i>Phycis chuss</i> juv.	1
<i>Hemitripterus americanus</i> "	4
<i>Raja erinacea</i> 19 ♂ 27 ♀	

TEMPERATURE RECORD.

Instrument used,
Current number of observation, 928.
Date, July 20, 1881.
Locality,
Bearings, Gay Head Lt. $W 3/4 E$ dist. $2 1/8$ m.
Tarpanlin Cove Lt. $NNE 1/8 E$ " $6 1/2$ "
Time of day, 11.30 A.M.; of tide, Low water
State of sky, Cloudy
Temperature of air, 69
" surface of water, $62 1/2$
" at depth of fathoms,
" of bottom, 60
Depth, in fathoms, 10
Nature of bottom, Sand
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Haul 930. Dredge.

(929 contained no fish.)

<i>Porhomette maculata</i>	3
Labrid very young	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

930

Date,

July 20, 1881.

Locality,

Bearings, Gay Head S by N.

4 $\frac{3}{4}$ m.

Vineyard. Id. Lt. Ship N $\frac{3}{4}$ S

7 $\frac{1}{2}$ "

Time of day, 1.16 P.M. ; of tide, Low water

State of sky,

Cloudy

Temperature of air,

65

" surface of water, 63

" at depth of fathoms,

" of bottom, 62

Depth, in fathoms,

12

Nature of bottom,

Sand + shells.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 931. Dredge.

Ammodytes americanus 4

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 931.

Date, July 20, 1881.

Locality,

Bearings, Nobska Lt. E N E 8 m.

Gay Head S N by S $1\frac{1}{2}$ S 5 $\frac{1}{2}$ "

Time of day, 1.42 P.M. ; of tide, flood

State of sky, Cloudy

Temperature of air, 65

" surface of water, 63

" at depth of fathoms,

" of bottom, 62

Depth, in fathoms, 16

Nature of bottom, Sand & shells.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 932. Dredge.

<i>Muraenoides gunnellus</i>	/
<i>Cottus aeneus</i> juv.	/

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 932.

Date, July 20, 1881.

Locality, Vineyard. Id. off Lockett's Bay

Bearings, Tarpanin Cove Lt. N by S $1/2$ S 3 m.

Noboka Lt. NE by E $3/4$

Time of day, 2.43 P.M. ; of tide, flood

State of sky, Cloudy

Temperature of air, 67

" surface of water, 66

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 14

Nature of bottom, Rock

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 934.

(Dredge 933, no fish.)

<i>Paralichthys dentatus</i>	1
<i>Muraenoides gunnellus</i>	1
<i>Prionotus carolinus</i>	6

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 934.

Date, July 20, 1881.

Locality, Off Falmouth Harbor.

Bearings, Noboka Lt. W $\frac{3}{4}$ S 1 $\frac{3}{4}$ m.

West Chop Lt. S $\frac{3}{4}$ E 2 $\frac{3}{4}$ "

Time of day, 4.10 P.M.; of tide, flood

State of sky, Cloudy

Temperature of air, 68

" surface of water, 67

" at depth of fathoms,

" of bottom, 67

Depth, in fathoms, 9

Nature of bottom, Sd. + gravel.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 935

Trawl fouled. One red shrimp
taken and a couple of surface
animals.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 935

Date, Aug. 4, 1881.

Locality, $32^{\circ}45'$ N. $69^{\circ}44'45''$ W. Is.

Bearings,

Time of day, 8.14 A.M.; of tide,

State of sky, Fog

Temperature of air, 72°

" surface of water, 70°

" at depth of fathoms,

" of bottom, 39.5°

Depth, in fathoms, 770

Nature of bottom, sand + mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel, Fish Hawk

To what service attached, U. S. F. C.

Name and rank of commanding officer,

Lt. J. L. Tanner.

Name and position of observer,

A. P. Chapin.

REMARKS.

Haul 936.

1 Echinostoma ? Stomias	1
1 Scopelus	21

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 936

Date, Aug. 4, 1881

Locality, $39^{\circ} 46' 30''$ N. $69^{\circ} 47'$ W. obs.

Bearings,

Time of day, 10, 43 a.m.; of tide,

State of sky, Clear

Temperature of air, 78°

" surface of water, 71°

" at depth of fathoms,

" of bottom, 39.5°

Depth, in fathoms, 705

Nature of bottom, gr. mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 937.

<i>Physia</i> <i>Chesteri</i>	few
" <i>tennis</i>	1
<i>Macrurus</i> <i>Bairdii</i> juv.	few
<i>Scopelus</i>	moderate
<i>Amitra</i> ?	3
<i>Sphidrid</i> ?	1
<i>Nezumichthys</i>	1
<i>Lycodes</i> 2 short lat. lines	1
<i>Simenichthys</i>	
<i>Synaptobranchius</i>	
<i>Glyptcephalus</i> juv.	2

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 937

Date, Aug. 4, 1881

Locality, Off Nantucket

Bearings, $39^{\circ} 49' 25''$ $69^{\circ} 49'$

Time of day, 12.45 ; of tide,

State of sky, Clear

Temperature of air, 75

" surface of water, 72

" at depth of fathoms,

" of bottom, 40.5 °

Depth, in fathoms, 506

Nature of bottom, Mud + sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 938.

✓ <i>Hadicutia senticosa</i>		12
✓ <i>Glyptocephalus cynoglossus</i>		2
✓ <i>Phycis Chesteri</i>		2
✓ " <i>tennis</i>		1
✓ <i>Macrurus Baudli</i>		20
✓ <i>Lycodes Verillii</i>		3
✓ <i>Careproctus ?</i>	juv.	1
✓ <i>Amitra ?</i>		2
✓ <i>Coelocampus microps</i>		1
✓ <i>Scopelus</i>		many
✓ <i>Synaphobranchus</i>		5
✓ <i>Raja</i>	juv.	1
✓ <i>Nemichthys</i>		2

Great numbers of swordfish
sharks & porpoises have been
around us, some whales &
some very large schools of
mackerel (?)

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 938

Date, Aug 4 1881

Locality, Off Nantucket

Bearings, $39^{\circ} 51'$ $69^{\circ} 49' 15''$

Time of day, 2.44 ; of tide,

State of sky, Clear

Temperature of air, 80

" surface of water, 72.5

" at depth of fathoms,

" of bottom, 420

Depth, in fathoms, 310

Nature of bottom, green mud + sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 939.

✓	<i>Pagrus Chestei</i>	many
✓	<i>Macurus Bairdii</i>	"
✓	" <i>carminatus</i>	few
✓	<i>Merluccius</i>	"
✓	<i>Mysine glutinosa</i>	"
✓	<i>Glyptocephalus</i>	4
	<i>Raia</i>	1 egg
✓	<i>Halicentaea senticosus</i>	few
✓	<i>Setarches parvatus</i>	2
	<i>Raia</i> juv.	1
✓	<i>Lycodes Nevilli</i> juv.	2

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 939

Date, Aug. 4, 1881.

Locality, Off Nantasket

Bearings, $39^{\circ} 53' N$ $69^{\circ} 50' 30'' W$

Time of day, 4.25 ; of tide,

State of sky, Clear

Temperature of air, 78

" surface of water, 73

" at depth of fathoms,

" of bottom, 47

Depth, in fathoms, 258

Nature of bottom, Green mud + sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 940.

Physic chuss	5-
✓ Merluccius	1
✓ Paralichthys oblongus	9
✓ Citharichthys arc	few
✓ Raia eglan	2
✓ Peristidium miniatum	1
✓ Letaarchus	1
✓ Centriscom Sceloporus	many
	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 940

Date, Aug. 4, 1881.

Locality, Off Nantucket

Bearings, $39^{\circ}54'$ $69^{\circ}51'30''$

Time of day, 5.30 P.M.; of tide,

State of sky, Clear

Temperature of air, 76

“ surface of water, 72

“ at depth of fathoms,

“ of bottom, 52

Depth, in fathoms, 130

Nature of bottom, Sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 941.

- | | | |
|---|------------------------------------------|----|
| ✓ | <i>Zonger</i> | 1 |
| ✓ | <i>Ophidiid</i> | 14 |
| ✓ | <i>Physiculus</i> juv. | 2 |
| ✓ | <i>Citharichthys</i> arc. juv. | 1 |
| ✓ | <i>Ammotocarpa</i> for <i>Aphroditia</i> | 1 |

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 941

Date, Aug. 4, 1881,

Locality, Off Nantucket

Bearings, $40^{\circ} 01'$ $69^{\circ} 56'$

Time of day, 7.45 PM ; of tide,

State of sky, Clear

Temperature of air, 74°

“ surface of water, 71

“ at depth of fathoms,

“ of bottom, 52°

Depth, in fathoms, 76

Nature of bottom, Sand + mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 942 Dredge

Same loc. as trawl line haul

Trawl line took ;

✓ <i>Lopholatilus</i>	8
✓ <i>Phycis tenuis</i>	20
✓ <i>Merluccius</i>	7
✓ <i>Raja laevis</i>	9

8 *Lopholatilus* weighed 158 lb.
 Smallest 2 lb, largest 29.
 one weighed 2 1/2 lb.

A ♀ contained immature eggs.

Stomachs of *Lopholatilus* contained *Cancer borealis* & a large shrimp in abundance.

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 942

Date, Aug 9 1881

Locality,

Bearings, Lat 40 01 Lon 71 12 30

Time of day, 6.15 A.M.; of tide,

State of sky, Clear

Temperature of air, 72°

“ surface of water, ~~79°~~ 69

“ at depth of fathoms,

“ of bottom, 50°

Depth, in fathoms, 134

Nature of bottom, Sd + mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 943

Dredge

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 943

Date, Aug. 9 1887

Locality,

Bearings, Lat 40° Lon 71 14 30

Time of day, 7.10 A.M.; of tide,

State of sky, Clear

Temperature of air, 76°

" surface of water, 70°

" at depth of fathoms,

" of bottom, 49°

Depth, in fathoms, 153

Nature of bottom, Md sand & shells

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 944

Ref. no.

1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 944

Date, Aug. 9, 1887

Locality,

Bearings, Lat $40^{\circ} 01'$ Lon. $71^{\circ} 14' 30$

Time of day, 8.27 a.m.; of tide,

State of sky, Clear

Temperature of air, 78°

" surface of water, 70°

" at depth of fathoms,

" of bottom, 57 f

Depth, in fathoms, 124

Nature of bottom, Sd., mud & shells

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 945.

✓ <i>Physic</i> <i>Chesteri</i>		4 pairs
✓ " <i>Lenis</i>		few
✓ <i>Merluccius</i>		mod.
✓ <i>Macrurus</i> <i>Bairdii</i>		many
✓ " <i>carminatus</i>		few
✓ <i>Halicantax</i> <i>serotinus</i>		"
✓ <i>Carpodacus</i>		1
✓ <i>Glyptocephalus</i>		few
✓ <i>Raja</i> <i>lenis</i>	♀	1 large
✓ <i>Raja</i> <i>jun.</i>		
✓ " <i>egg</i>		1
✓ <i>Scophus</i>		1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 945

Date, Aug. 9, 1887.

Locality, Lat. $39^{\circ}58'$ Lon $71^{\circ}13'$

Bearings,

Time of day, 12.05 ; of tide,

State of sky, Clear

Temperature of air, 75°

" surface of water, 71°

" at depth of fathoms,

" of bottom, 44

Depth, in fathoms, 202

Nature of bottom, Gn. mud + sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 946.

✓ <i>Phycis</i> <i>Chesteri</i>	∞ - the great bulk	
✓ <i>Merluccius</i>	mod.	
✓ <i>Enchelyopus</i> <i>cimbrius</i>		2
✓ <i>Sebastes</i> <i>marinus</i>		1
✓ <i>Petromyzon</i> <i>marinus</i>		1
✓ <i>Myxine</i> <i>glutinosa</i>		1
✓ <i>Synaphobranchus</i>		3
✓ <i>Costionculus</i> <i>microps</i>		2
<i>Raia</i>	large egg	1
✓ " <i>radiata</i> <i>juv.</i>		2
"	"	2
✓ <i>Careproctus</i>		2
✓		1
✓ <i>Stalientia</i>		1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 946

Date, Aug. 9, 1887

Locality, $39^{\circ}55'30''$ Lon $71^{\circ}14'$

Bearings,

Time of day, 2 P.M. ; of tide,

State of sky, Clear

Temperature of air, 75.5°

" surface of water, 71°

" at depth of fathoms,

" of bottom, 47

Depth, in fathoms, 241.

Nature of bottom, Gr., mud & sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 947.

✓ <i>Physa</i>	<i>Physa</i>	∞
✓ <i>Naemus</i>	<i>Naemus</i>	∞
✓ <i>Merluccius</i>	<i>Merluccius</i>	few
✓ <i>Glyptocephalus</i>	<i>Glyptocephalus</i>	few
✓ <i>Lipophrys</i>	<i>Lipophrys</i>	11
✓ <i>Alia</i>	<i>Alia</i>	4
✓ <i>Congor</i>	<i>Congor</i>	2
✓ <i>Cottus</i>	<i>Cottus</i>	3
✓ <i>Scorpa</i>	<i>Scorpa</i>	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 947

Date, Aug. 9, 1881

Locality, 39 53 30 Lat. 71° 13' 30"

Bearings,

Time of day, 4 PM ; of tide,

State of sky, clear

Temperature of air, 75°

" surface of water, 70°

" at depth of fathoms,

" of bottom, 44°

Depth, in fathoms, 312.

Nature of bottom, ~~fine~~ sand & mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 948.

<i>Lophopsetta maculata</i>	juv.	many
<i>Limanda ferruginea</i>	juv.	few
<i>Pleuronectes americanus</i>	juv.	many
<i>Paralichthys oblongus</i>	juv.	"
<i>Phycis chuss</i> ?	juv.	few
<i>Stenotomus argyrops</i>	"	many
<i>Enchelyopus cimbrius</i>	"	1
<i>Prionotus</i>	"	few

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 948

Date, Aug. 13, 1881

Locality, Off Spricks' Hole, Buzzards B.

Bearings, Penikese Id. E 2 m.

Time of day, 5.20 P.M.; of tide.

State of sky, Clear

Temperature of air, 76

" surface of water, 67

" at depth of fathoms,

" of bottom, 66

Depth, in fathoms, 7

Nature of bottom, bl. md. + shells.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 040 R. S. S. S. S.

Stenodermus aculeatus

✓

Haul 041

✓ Stenodermus aculeatus 70 weighing 541 lbs.
Largest was a ♂ weighing 31 lbs.

✓ Raja tenuis

3

Stomach contents: Ophidiidae

? n. s. + Munida

✓ Raja laevis

many

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 949

Date, Aug. 23, 1881.

Locality, Lat $40^{\circ} 03' N$,

Bearings, Lon. $70^{\circ} 31' W$.

Time of day, 4, ^{a.m.}20 ; of tide,

State of sky, Clear

Temperature of air, 68

" surface of water, 66

" at depth of 5 fathoms, 66.

" of bottom, S 2

Depth, in fathoms, 100

Nature of bottom, Yellow sand

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 950

- ✓ *Pseudosquilla sinuata* 1
- ✓ *Libinia dubia* 1
- ✓ *Libinia dubia* 1
- ✓ *Libinia dubia* 1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 950

Date, Aug. 23, 1881.

Locality, Lat. $40^{\circ} 07' N$.

Bearings, Lon. $70^{\circ} 32' W$.

Time of day, 5.50 ; of tide,

State of sky, Clear

Temperature of air, 69

" surface of water, 65-

" at depth of fathoms,

" of bottom, 52

Depth, in fathoms, 69

Nature of bottom, Sand Sh. M. S. M.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

201

✓ <i>Kaburataea sentosa</i> .	Many
✓ <i>Myxine glutinosa</i> .	"
✓ <i>Scorpaenopsis</i>	3
✓ <i>Enchelyopus cimbrius</i>	4
✓ <i>Antisoma</i>	2
✓ <i>Pagrus auratus</i>	Many
✓ <i>...</i>	"
✓ <i>...</i>	"
✓ <i>...</i>	1
✓ <i>...</i>	2
32? ...	1
✓ <i>Raia</i>	
Raia	juv. from large egg

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation,

Date, *Aug. 23, 1881*

Locality, *951*

Bearings, *Lat 39° 57' N.*
Lon. 70° 31' 30 W.

Time of day, *9:20* ; of tide,

State of sky, *Clear*

Temperature of air, *78*

" surface of water, *67.2*

" at depth of *2* fathoms,

" of bottom, *41*

Depth, in fathoms, *219*

Nature of bottom, *sand.*

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 952

✓ <i>Phycis Chesteri</i>		many
✓ <i>Macrurus Bairdii</i>		"
✓ " <i>carminatus</i>		"
✓ <i>Glyptocephalus cynog.</i>		11
✓ <i>Synaphobranchus pinnatus</i>		11
✓ <i>Lycodes Vahlü?</i>		1
✓ <i>Congrogadid?</i>	n.g.	3
✓ <i>Amitra liparina</i> (+ 1 thrown away)		1
✓ <i>Xenichthys</i>		1
✓ <i>Centroscyllium</i>	ad. ^{Size very large &} ^{iridescent humer. shows} ^{the faint green - glowing.}	1
✓ " "	juv.	2
✓ <i>Scopelus</i>		many
✓ <i>Cottunculus</i>	juv.	2
✓ <i>Gadoid</i> juv. <i>Physiculus Dalrym?</i>		1
✓ <i>Cicardius?</i> juv. <i>Sternoptichide</i>		4

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 952

Date, Aug. 23, 1881

Locality, Lat. $39^{\circ} 55' N$.

Bearings, Lon. $70^{\circ} 28' W$.

Time of day, 11, 28 a m ; of tide,

State of sky, Clear

Temperature of air, 82°

" surface of water, 68°

" at depth of fathoms,

" of bottom, 40°

Depth, in fathoms, ~~388~~ fath. 396

Nature of bottom, Yellow md + sd.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 953.

✓ <i>Stomias</i>	1
✓ <i>Chauliodon</i> ? juv.	8
✓ <i>Scopelus</i>	3
✓ <i>Scopelus</i>	1

Monacanthus at surface 4

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 953

Date, Aug. 23, 1881

Locality, Lat. $39^{\circ} 52' 30''$ N.

Bearings, Lon. $70^{\circ} 17' 30''$ W.

Time of day, ^{2.30}~~3~~ P.M., ; of tide.

State of sky,

Temperature of air, ~~72~~⁷⁷ °

" surface of water, 68°

" at depth of fathoms,

" of bottom, 39.5°

Depth, in fathoms, ~~715~~ 724

Nature of bottom, Md.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 954.

~~vicinia~~
~~vicinia~~ ? juv.

2
5
7

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 954

Date, Aug. 23, 1881.

Locality, Lat. $39^{\circ}53'N$.

Bearings, Lon. $70^{\circ}18'30''W$.

Time of day, 4.50 P.M.; of tide,

State of sky, Clear

Temperature of air, 74.5°

" surface of water, 68°

" at depth of fathoms,

" of bottom, 39.5°

Depth, in fathoms, ~~642~~ 651

Nature of bottom, Sd. + md.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

June 953

<i>Achimenes lineatus</i>	
<i>Paralichthys oblongus</i>	juv.
<i>Prionotus evolans</i>	juv.
" <i>carolinus</i>	"
<i>Centropomus atrarius</i>	"
<i>Pleuronectes americanus</i>	"
<i>Paralichthys dentatus</i>	
<i>Eucalyptus</i>	
<i>Stenotomus argyrops</i>	juv.
<i>Tetrodon lineatus</i>	juv.
<i>Physiculus tenuis</i>	juv.
<i>Lophopsetta maculata</i>	"

TEMPERATURE RECORD.

Instrument used, *Trawl with rings*
Current number of observation, *956*
Date, *Aug 26, 1881*
Locality, *E. of Lordsburg*
Bearings, *Nye's Neck E by S* *1/4 m*
Time of day, *a.m.* *10.50*; of tide, *ebb*
State of sky, *clear*
Temperature of air, *89*
" surface of water, *67.5*
" at depth of fathoms,
" of bottom, *68*
Depth, in fathoms, *7*
Nature of bottom, *sand*
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Hand 2.50

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 955

Date, Aug. 10, 1881

Locality, Blue sand bar

Bearings, Nye's neck SSE $\frac{3}{4}$ E $\frac{1}{8}$ m.

Time of day, 11.26^{a.m.}; of tide, ebb

State of sky, Clear

Temperature of air, 71

" surface of water, 69

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 5 $\frac{1}{4}$

Nature of bottom, Sandy

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 957

Date, Aug 26, 1887

Locality, Red Bank, Pa.

Bearings, Nye's Neck S S E $3/4$ E $1/8$ m

Time of day, 11, 45^{a.m.}; of tide, ebb

State of sky, Clear

Temperature of air, 73

" surface of water, 69.5

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 6

Nature of bottom, Sand & sh. ...

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

1/20/11

Enchelyopus cimbrius

2

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 956

Date, Aug. 26

Locality, Rye Beach, Wis.

Bearings, Rye's Neck S by E $\frac{1}{4}$ E $\frac{1}{3}$ m. ~~the~~

Time of day, ^{noon} 12.20 ; of tide, ebb

State of sky, clear

Temperature of air, 76°

" surface of water, 70

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 5-

Nature of bottom, Sand, Shells & shells

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Parasites

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 909

Date, Aug. 26, 1881

Locality, Buzzards Bay

Bearings, Nye's Neck S $\frac{1}{2}$ m.

Time of day, noon 12.40 ; of tide, ebb

State of sky, Clear

Temperature of air, 72

" surface of water, 69

" at depth of fathoms,

" of bottom, 6 f

Depth, in fathoms, 10

Nature of bottom, Sand & Stones & Shells

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 960

Date, Aug 26th 1881

Locality, Buzzards Bay

Bearings, Nye's Neck S ³/₄ E 1/2 m

Time of day, P. M., 1.10 ; of tide,

State of sky, Clear

Temperature of air, 72.5

" surface of water, 69.5

" at depth of fathoms,

" of bottom, G S

Depth, in fathoms, 4 1/2

Nature of bottom, Sand & Shells & Gravel

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Staul 961

Gobiosoma

1

TEMPERATURE RECORD.

Instrument used,
Current number of observation, 961
Date, Aug 26, 1881
Locality, Buzzards Bay
Bearings, Nyes Neck N E $3/4$ E 2 $3/4$ m
P. m.
Time of day, 1.52 ; of tide, low water
State of sky, Clear
Temperature of air, 71.5
" surface of water, 69
" at depth of fathoms,
" of bottom, 68
Depth, in fathoms, 8
Nature of bottom, Black mud,
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.